

## EAST Search History

R.A.

| Ref # | Hits   | Search Query                       | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|--------|------------------------------------|---|------------------|---------|------------------|
| S1    | 820    | koji near3 shimizu                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:32 |
| S2    | 580    | ito near2 akihiko                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:32 |
| S3    | 19     | S1 & S2                            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:33 |
| S4    | 1447   | 345/100.ccls.                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 13:32 |
| S5    | 258695 | (select\$4 near4 circuit\$2)       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:34 |
| S6    | 609    | S4 & S5                            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:35 |
| S7    | 375817 | (select\$4 near3 signal\$1)        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:38 |
| S8    | 114102 | S5 & S7                            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:38 |
| S9    | 486    | S4 & S8                            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:38 |
| S10   | 63623  | (de\$1multiplex\$4)                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 14:47 |
| S11   | 381559 | (de\$1multiplex\$4   multiplex\$4) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/09/12 08:39 |

## EAST Search History

|     |         |  |   |    |     |                  |
|-----|---------|--|---|----|-----|------------------|
| S12 | 134     | S9 & S11                                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:43 |
| S13 | 17554   | ((data   video) near3 line near3<br>select\$4) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:43 |
| S14 | 1739    | S11 same S13                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:44 |
| S15 | 170     | S10 same S13                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:44 |
| S16 | 367645  | (tim\$3 near3 generat\$4)                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:44 |
| S17 | 1238778 | ((tim\$3   signal\$3) near3<br>generat\$4)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:45 |
| S18 | 3       | S15 same S16                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:45 |
| S19 | 13      | S15 same S17                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 08:45 |
| S20 | 304     | S4 & S11                                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 09:06 |
| S21 | 52      | S4 & S10                                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 09:09 |
| S22 | 2       | "6980195".pn.                                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 09:31 |
| S23 | 9       | "2325329"                                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 09:31 |
| S24 | 1       | 1998-560245.NRAN.                              | DERWENT                                     | OR | OFF | 2006/09/12 09:35 |

## EAST Search History

|     |        |  |   |    |     |                  |
|-----|--------|--|---|----|-----|------------------|
| S25 | 1      | "5170158".pn.  | DERWENT                                     | OR | OFF | 2006/09/12 09:43 |
| S26 | 17826  | (data near3 driv\$3)   | DERWENT                                     | OR | OFF | 2006/09/12 09:43 |
| S27 | 244    | S11 same S26   | DERWENT                                     | OR | OFF | 2006/09/12 09:43 |
| S28 | 46     | S10 same S26   | DERWENT                                     | OR | OFF | 2006/09/12 09:46 |
| S29 | 71     | S10 & S26  | DERWENT                                     | OR | OFF | 2006/09/12 09:46 |
| S30 | 25     | S29 not S28  | DERWENT                                     | OR | OFF | 2006/09/12 09:51 |
| S31 | 25321  | ((data   column   video) near3 (driv\$3))                    | DERWENT                                     | OR | OFF | 2006/09/12 13:26 |
| S32 | 89     | S10 & S31  | DERWENT                                     | OR | OFF | 2006/09/12 09:51 |
| S33 | 18     | S32 not S29  | DERWENT                                     | OR | OFF | 2006/09/12 09:53 |
| S34 | 312    | S5 same S31  | DERWENT                                     | OR | OFF | 2006/09/12 09:55 |
| S35 | 73899  | (switch\$3 near3 signal\$1)                                  | DERWENT                                     | OR | OFF | 2006/09/12 13:35 |
| S36 | 9      | S34 & S35  | DERWENT                                     | OR | OFF | 2006/09/12 09:55 |
| S37 | 51     | S31 & (S5   S11) & S35                                       | DERWENT                                     | OR | OFF | 2006/09/12 13:34 |
| S38 | 75221  | ((signal   image   display) near3 (driv\$3))                 | DERWENT                                     | OR | OFF | 2006/09/12 13:30 |
| S39 | 243    | S38 & (S5   S11) & S35                                       | DERWENT                                     | OR | OFF | 2006/09/12 13:28 |
| S40 | 0      | "345"/\$!.ccls.  | DERWENT                                     | OR | OFF | 2006/09/12 13:28 |
| S41 | 0      | "345"/\$!.ccls.  | DERWENT                                     | OR | OFF | 2006/09/12 13:29 |
| S42 | 0      | ("345"/\$!).ccls.  | DERWENT                                     | OR | OFF | 2006/09/12 13:29 |
| S43 | 0      | "345"/\$3.ccls.  | DERWENT                                     | OR | OFF | 2006/09/12 13:29 |
| S44 | 425616 | ((signal   image   display) near3 (driv\$3))                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 13:31 |
| S45 | 518914 | ((signal   image   display   data   column) near3 (driv\$3)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:47 |
| S46 | 76726  | "345"/\$!.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 13:32 |
| S47 | 9441   | S10 & S45  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 13:32 |
| S48 | 1677   | S10 same S45   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 13:32 |

## EAST Search History

|     |         |  |   |    |     |                  |
|-----|---------|--|---|----|-----|------------------|
| S49 | 397814  | (switch\$3 near3 signal\$1)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:49 |
| S50 | 175     | S45 & (S5   S10) & S49   | DERWENT                                     | OR | OFF | 2006/09/12 14:19 |
| S51 | 11      | S45 & S10 & S49  | DERWENT                                     | OR | OFF | 2006/09/12 14:20 |
| S52 | 4       | "5051739".pn.   "5712653".pn.  <br>"5870071".pn.   "6232939".pn.                   | DERWENT                                     | OR | OFF | 2006/09/12 14:07 |
| S53 | 1361    | signal\$1 near3 (both   oppos\$4)<br>near4 (end\$1   side\$1)                      | DERWENT                                     | OR | OFF | 2006/09/12 14:08 |
| S54 | 27      | (supply\$3 near3 signal\$1 near3<br>(both   oppos\$4) near4 (end\$1  <br>side\$1)) | DERWENT                                     | OR | OFF | 2006/09/12 14:20 |
| S55 | 23962   | S45 & (S5   S10) & S49   | US-PGPUB;<br>USPAT;<br>JPO;<br>DERWENT      | OR | OFF | 2006/09/12 14:19 |
| S56 | 3405    | S45 & S10 & S49  | US-PGPUB;<br>USPAT;<br>EPO; JPO             | OR | OFF | 2006/09/12 14:21 |
| S57 | 166     | (supply\$3 near3 signal\$1 near3<br>(both   oppos\$4) near4 (end\$1  <br>side\$1)) | US-PGPUB;<br>USPAT;<br>EPO; JPO             | OR | OFF | 2006/09/12 14:20 |
| S58 | 1       | S56 & S57  | US-PGPUB;<br>USPAT;<br>EPO; JPO             | OR | OFF | 2006/09/12 14:20 |
| S59 | 173     | S46 & S56  | US-PGPUB;<br>USPAT;<br>EPO; JPO             | OR | OFF | 2006/09/12 14:33 |
| S60 | 2       | "6566643".pn.   "6650462".pn.  | US-PGPUB;<br>USPAT;<br>EPO; JPO             | OR | OFF | 2006/09/12 14:34 |
| S61 | 633113  | ((signal   image   display   data  <br>column   source) near3 (driv\$3))           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:47 |
| S62 | 64548   | (de\$1multiplex\$4   de\$1mux\$1)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:47 |
| S63 | 1430364 | ((switch\$3   control\$4) near3<br>signal\$1)                                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:49 |

## EAST Search History

|     |        |   |   |    |     |                  |
|-----|--------|---|---|----|-----|------------------|
| S64 | 8025   | S61 & S62 & S63   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:49 |
| S65 | 425    | S46 & S64   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 14:50 |
| S66 | 252    | S65 not S59   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:21 |
| S67 | 219691 | (control near3 signal\$1 near3<br>generat\$3)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:23 |
| S68 | 1704   | ((control near3 signal\$1 near3<br>generat\$3) same ((both   oppos\$4)<br>near4 (end\$1   side\$1)))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:32 |
| S69 | 602    | S61 & S68   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:24 |
| S70 | 164    | S61 same S68  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:24 |
| S71 | 5      | ((supply\$3   feed\$3   provid\$3  <br>deliver\$3 ) near6 (control near3<br>signal\$1 near3 generat\$3) near6<br>((both   oppos\$4) near4 (end\$1  <br>side\$1))) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:35 |
| S72 | 81     | ((supply\$3   feed\$3   provid\$3  <br>deliver\$3 ) near6 (control near3<br>signal\$1 near3 generat\$3) same<br>((both   oppos\$4) near4 (end\$1  <br>side\$1)))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:41 |
| S73 | 58     | ((supply\$3   feed\$3   provid\$3  <br>deliver\$3 ) near6 (signal\$1 near3<br>generat\$3) near4 ((both   oppos\$4)<br>near4 (end\$1   side\$1)))                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:43 |
| S74 | 53     | S73 not S72   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:42 |

## EAST Search History

|     |       |   |   |    |     |                  |
|-----|-------|---|---|----|-----|------------------|
| S75 | 1212  | ((supply\$3   feed\$3   provid\$3   deliver\$3 ) near6 (signal\$1) near4 ((both   oppos\$4) near4 (end\$1   side\$1)))                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 17:17 |
| S76 | 76726 | "345"/\$!.ccls.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:59 |
| S77 | 53    | S75 & S76   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 16:59 |
| S78 | 854   | ((supply\$3   feed\$3   provid\$3   deliver\$3 ) near6 (signal\$1) near4 ((first & second) near4 (end\$1   side\$1)))                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 17:01 |
| S79 | 35    | S76 and S78   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 17:01 |
| S80 | 9     | ("5745087"   "5748164"   "6160535"   "6169532").PN. OR ("6262702").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                | OR | OFF | 2006/09/12 17:14 |
| S81 | 9     | ((supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj signal\$1) near4 ((both   oppos\$4) near4 (end\$1   side\$1))) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:51 |
| S82 | 0     | ((supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj signal\$1) near4 ((first & second) near4 (end\$1   side\$1)))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 17:28 |
| S83 | 0     | ((supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj signal\$1) near4 ((first & second) same (end\$1   side\$1)))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 09:17 |
| S84 | 15    | ("5686936"   "5708454"   "5764207"   "5801673"   "5959600"   "6037923"   "6072457").PN. OR ("6531996").URPN.                                | US-PGPUB;<br>USPAT;<br>USOCR                | OR | OFF | 2006/09/12 17:58 |
| S85 | 60    | ((supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj signal\$1) same ((both   oppos\$4) near4 (end\$1   side\$1)))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 18:10 |
| S86 | 51    | S85 not S81   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/12 18:10 |

## EAST Search History

|     |      |  |   |    |     |                  |
|-----|------|--|---|----|-----|------------------|
| S87 | 3    | ((supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj signal\$1) near4 ((both   oppos\$4) near4 (terminal\$1)))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:37 |
| S88 | 1    | ((supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj signal\$1) near4 ((first & second) same (terminal\$1)))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:39 |
| S89 | 18   | (re\$1enforc\$3 near3 signal)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:41 |
| S90 | 1284 | (control\$4 near6 (("same" adj signal\$1   pulse\$1   voltage\$1) near4 (first & second) same (end\$1   side\$1)))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:44 |
| S91 | 5    | (control\$4 near6 (("same" adj signal\$1) near4 ((both   oppos\$4) near4 (end\$1   side\$1))))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:44 |
| S92 | 2    | (control\$4 near6 (("same" adj (signal\$1   pulse\$1   voltage\$1)) near4 (first & second) same (end\$1   side\$1)))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:48 |
| S93 | 9    | (control\$4 near6 (("same" adj (signal\$1   voltage\$1   pulse\$1)) near4 ((both   oppos\$4) near4 (end\$1   side\$1))))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:47 |
| S94 | 13   | (generat\$4 near6 (("same" adj (signal\$1   voltage\$1   pulse\$1)) near4 ((both   oppos\$4) near4 (end\$1   side\$1)))  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:48 |
| S95 | 1    | (generat\$4 near6 (("same" adj (signal\$1   pulse\$1   voltage\$1)) near4 (first & second) same (end\$1   side\$1)))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 08:48 |
| S96 | 106  | ((generat\$4   supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj3 (signal\$1   puls\$3   voltage\$1)) near4 ((both   oppos\$4) near4 (end\$1   side\$1))) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 09:23 |
| S97 | 7    | ("5686936"   "5973658"   "6163310"   "6369786"   "6437767"   "6456353").PN. OR ("6670940").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                | OR | OFF | 2006/09/13 09:14 |

## EAST Search History

|          |       |  |   |    |     |                  |
|----------|-------|--|---|----|-----|------------------|
| S98      | 5     | ((generat\$4   supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj (signal\$1   puls\$3   voltag\$3)) near4 ((first & second) same (end\$1   side\$1)))                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 09:22 |
| S99      | 21    | ((generat\$4   supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj (signal\$1   puls\$3   voltag\$3)) near4 ((first & second) same (end\$1   side\$1   terminal\$1)))     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 09:22 |
| S10<br>0 | 150   | ((generat\$4   supply\$3   feed\$3   provid\$3   deliver\$3   apply\$3) near6 ("same" adj3 (signal\$1   puls\$3   voltage\$1)) near4 ((both   oppos\$4) near4 (end\$1   side\$1   terminal\$1))) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 09:23 |
| S10<br>1 | 16    | S99 not S98  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 09:24 |
| S10<br>2 | 44    | S100 not S96   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 12:34 |
| S10<br>3 | 17122 | (345/87-100,204-213,690-699).ccls.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/09/13 13:09 |